CENTRE FOR INSTRUCTIONAL TECHNOLOGY · SIR GEORGE WILLIAMS UNIVERSITY · MONTREAL · QUE · CANADA

CENTRE FOR INSTRUCTIONAL TECHNOLOGY

ANNUAL REPORT

June 1, 1973 - May 31, 1974

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POLICIES

The ongoing revision of the aims, structure and practices of the Centre for Instructional Technology has been continued during the period 1st June 1973 to 31st May 1974.

As a consequence, there has been an overhaul and refinement of several minor aspects of routine methods and procedures.

The results achieved suggest that in the light of experience there is no reason to alter the existing operational philosophy, which is that the special circumstances of the University impose a need for pooling and centralising audio-visual installations, equipment and resources under a specialist administration.

The Centre has therefore maintained its primary role as a utility department, providing services to the campus and the general community, with a major emphasis on considerations of user-convenience and overall economy.

In practical terms, this has involved a policy of raising the effective levels of utilisation of audio-visual material in the University by progressive development of the methods of distribution and control of inventory items, the improvement and maintenance of equipment and installations, the procurement services for existing software, the in-house production of original materials, and the investigation and assessment of new devices and methods in the field of instructional technology.

In parallel to this established main axis of activity, a substantial secondary role has steadily developed for the C.I.T. as a resource centre for informal consultancy, training and instruction. Despite the volume of demands at all levels, the policy constraints from the original mandate have been observed, to limit involvement in teaching activities to practical demonstrations and workshop-style sessions, and so avoid any encroachment into the area of academic course-work.

ORGANIZATION AND ADMINISTRATION

The organizational arrangement set up in September 1972 has continued unchanged.

Under this system, as shown in the organigram in the Appendix, the C.I.T. reports administratively to the Assistant Vice-Rector, Communications.

The permanent staff of 31 is grouped into eight Divisions comprising a small Administrative centre and seven specialist cadres to deal with activities in the areas of Technical Operations, Media Services, Language and Learning Laboratories, Materials Production, Cinema Services, Technical Development and Maintenance, and Instructional Research and Development.

Progress and development of operations is coordinated and reviewed at regular weekly conferences attended by all Heads of Divisions.

An important administrative improvement was introduced during the year by the institution of an internal accounting system whereby each Division was allocated responsibility for issuing its own billings and invoices for recovery of service charges.

An equally important organizational development was the creation by the Technical Operations Division of a semi-autonomous sub-depot of equipment and facilities in the Norris Building to service the eastern campus complex.

A new system was initiated for the inventory and control of pool equipment. Procedures were also devised for the issuing of security passes, and for the penalising of late returns of borrowed items.

Despite a marked increase in the volume of business handled in all Departments, there were no increases in the number of permanent staff.

DEVELOPMENTS AND INNOVATIONS

All existing facilities and installations were retained at operational levels, and several additions and improvements were completed.

The Technical Division extended its schedules to provide a programme of preventive maintenance for all equipment on a rotational basis.

The Division also made five major contributions to increase the technical resources available.

Installation of a 32-position Learning Laboratory featuring multi-channel TV and cassette-recorder operation on an individualised basis was completed from designs drawn up by Division specialists.

A duplex demonstration-and observation-room closed-circuit TV system was designed and set up in the Norris Building for "mirror television" recording and playback sessions in Management and Business courses.

A sound-stage, Studio 'C', was put into service for practical and instructional work in audio production, recording and editing.

The permanent land-line link, to allow of direct broadcasts from the University over CFCF Radio transmitters, was finalised by the wiring-up of a complete studio terminal.

In anticipation of a possible switch-over to full colour TV working, the Division also initiated experiments with test equipment and began staff-training in its use.

Important technical refinements on a smaller scale included the phasing-out of rear-projection film working in auditoria, the installation of an electric winch in TV Studio 'A' to facilitate servicing of heavy equipment, construction of a digital frame- and footage-counter for the film recording suite, automation of the film animation-bench control system, and the production of a prototype computerised control device for the location and playback of pre-selected sequences in video-tape recordings.

For the Technical Operations Division, the year was similarly a period of development and expansion of services.

In addition to the organization and equipping of the Norris sub-depot already mentioned, the Division created a new resource by extemporising facilities in its own area for the assembly and preview of audio-visual materials prepared for academic course assignments by instructors and students.

It also completed the preparation of a dubbing suite for the transfer and replication in bulk of audio tape materials from disc, reel-to-reel and cassette originals. Installation of this resource relieved the pressure on recording and duplication facilities in out-depots and made possible the completion of large orders for several academic Departments and off-campus clients.

Advance planning was continued for the establishment of an audio-visual study centre to be operated jointly by the Division and the University Library.

Arrangements were also made for liaison and consultancy procedures with the newly-established Conference centre.

The acquisition of two items of equipment for the H-421 depot produced a marked improvement in service and efficiency. Introduction of the IBM 209 dry-copier has been followed by a doubling of the volume of overhead transparencies turned out, and use of the automatic film-inspection machine, by eliminating the tedious process of hand-winding, has shown comparable effects by increasing the throughput of films and eliminating breakdowns during projection.

In the Media Services Division, the main development during the year was the deposit by the British Information Services Office of an initial consignment of 160 film-titles for on-campus use and distribution through the Division's established network of contacts.

The expertise and reputation of the Language and Learning Laboratories Division was signalised by a request from the Laurentide School

Commission for consultancy, training and design resources in the preparation of a laboratory complex to be installed in support of their Adult Education programme. The Division Head was also called on to act as consultant in his specialty to organizations in the U.S.A., the Caribbean and Latin America. Preliminary discussions have been held as a result, to establish the University as a centre for the training of Spanish-speaking language teachers.

In the Materials Production Division, the most significant innovation was the production for the Department of Marketing of the University's first colour TV recording intended for off-campus distribution. This pilot project, completed with hired and borrowed equipment, has already had some circulation at conferences and lecture sessions, with a fair degree of success.

Two other original departures in the application of TV facilities in the University seem noteworthy. One instructor arranged for the recording of a short series of his lectures for playback to his classes so that he could honour his teaching commitments during an enforced absence. Another requested recording and playback of one of his own lectures so that he could make a self-evaluation of his performance as an instructor.

Resources from different Divisions were pooled in the preparation and production of an instruction manual and samples kit to explain and encourage the use of the overhead projector. The kit, intended for distribution to teachers inside and outside the University, is the test-model for a possible series on similar topics in instructional technology.

WORKSHOPS, DEMONSTRATIONS, LECTURES

Impromptu demonstrations and explanations, to individuals and small teams, of possible applications to their requirements of various aspects of instructional technology, are considered by the C.I.T. to be part of its everyday contribution to the activities of the University community, and are not recorded.

On a more formal and organized basis, personnel from the Centre fulfilled 21 requests for specialist lectures and practical work-sessions during the year.

Audio-visual working was selected as the keynote topic for a conference of the Canadian Library Association, organized by this University in conjunction with McGill. Four half-day units of instructional and practical sessions were delivered by C.I.T. staff to some 70 delegates.

A seminar was organized for the Department of Sociology on Aspects of Cinema in that area of study.

For students in the Moving Pictures Programme in the Department of Fine Arts, six classes were given on the theory and practice of audio working in film production, and three lecture-tours as an introduction to television studio techniques.

Four sessions on audio-visual resources were given to groups in the TESL programme, and three to summer school classes in Mathematics and French.

CONGRESSES, CONVENTIONS, FESTIVALS

The year brought the usual steady flow of community and social gatherings organized on University premises, with sharp upswings in frequency at holiday periods. These functions, although often small in scale and short in duration, impose heavy demands on all Divisions of the Centre, the brunt being borne chiefly by service personnel of Technical Operations and specialists assigned from the Technical Division.

On the larger scale, seven events were carried through which called for extensive support from the C.I.T. in terms of materials, staffing, facilities, and often of basic organizational reinforcement.

The IXth World Congress of the International Political Science Association involved the attendance of perhaps 1,500 delegates and utilisation past the saturation-point of every item on the Centre's inventory.

An International Film Festival on the Human Environment, while similarly taxing to the limit the resources available, was successfully serviced.

Smaller numbers and a different style of proceedings in the Congress organized by the Department of History and the Phenomenology symposium of the Department of Philosophy ensured a more adequate coverage.

In supporting the International Symposium on Low-Cost Housing Projects, however, there was a recurrence of the problems of complexity of demands, organizational improvisation and insufficiency of apparatus, implicit in cooperating with ventures of international scope and unpredictable requirements.

The established routines and specific demands for the annual student film festivals sponsored by the Conservatory of Cinematographic Art and the Department of Fine Arts Moving Pictures programme were followed again without difficulty.

PERFORMANCE: OVERVIEW

The range of regular activities of the C.I.T. is so variegated, and the appeals made to the skills and talents of its staff members so diverse, that it is difficult to present a summary of its performance in terms of any common denominator.

In the year under review, for example, requests were successfully handled for such disparate assignments as

- photography of antique charts and maps to provide evidence in litigation over international border demarcation lines
- filming a concrete canoe regatta
- providing special lighting effects for a Kathakali dance recital
- designing robes and regalia for University officials
- consultancy on the microphotography of a collection of historic Judaic manuscripts
- recovery of the content of an irreplaceable audio-recording produced on a machine with fading batteries
- technical support for a deaf-and-dumb mime theatre group performance

The policy of the Centre is to accept and execute any demand from any University source for any service within its terms of reference. From this viewpoint, it can be considered as a service organization which answers to the needs of a predetermined clientele.

Over the year, every single academic Department and most of the Administrative Offices made some call on the resources of the Centre. Their individual requirements varied from simple orders for overhead projector acetates or the supply of standard items of hardware, through exacting specifications for specialized artwork or photographs or schedules for complete course enrolments in studio and laboratory working, to complex productions in audio, film and television.

If the satisfaction of each of these requests is considered as a unit of service, or transaction, the Centre's records show a sum total over the twelve-month period of not less than 153,072 transactions.

DEPARTMENTAL ACTIVITIES AND STATISTICS

TECHNICAL DIVISION

Full-Time Staff: 8

Functions

The responsibilities of the Division are for the upkeep and development of technical systems in the University dedicated to support of the instructional process. These include the Language and Learning Laboratories complex, Television and Audio Studios, the Film Production suite, Cinema projection installations, the closed circuit television distribution system and the Centre's inventory of portable and transportable audio-visual production and common-user apparatus.

Operations

Transactions involve mainly the repair and servicing of equipment, check-out of fixed installations, design and construction of new devices, and some training and consultancy work on the operation of equipment.

The Division's records of service assignments reflect the rhythm of the academic year, with low figures for routine maintenance jobs during holiday periods, and a rising incidence during academic semester, with peaks at examination periods.

A minimum average figure of completed jobs is shown.

TRANSACTIONS 1,260

TECHNICAL OPERATIONS DIVISION

Full-Time Staff: 8

Functions

This Division handles by far the greatest volume of the daily business of the C.I.T.

Its responsibilities include the control, scheduling, supervision and operation of all facilities, installations and individual items on the University's audio-visual inventory.

In detail, operations include the organization, staffing and running of three main outlets for issues and returns of pool equipment, the handling of bookings for major fixed resources such as television and audio studios, the provision to Departments of specially-dedicated audio-visual apparatus, the programming of the campus closed-circuit cable network, the training and supply of film projectionists for classroom sessions, the routine checking and servicing of equipment in classrooms and auditoria, and the supply of expendable softwares such as acetate foils, audio-tapes and electric dry-cell batteries.

The Division has the main consultancy role for the University in the evaluation, selection, testing and ordering of specialized audio-visual equipment.

CENTRAL OFFICE

Full-Time Staff: 4

Operations

Bookings and schedulings of major facilities and events:	4,911 bookings

Notes and Observations

1. The records show a rise in bookings of more than 15% over the previous year's figures.
2. Computerisation of the University's a-v inventory system has been completed, and is now the basis for the annual equipment count, as well as for the routine billing and accounting of C.I.T. services.

CLOSED-CIRCUIT COMMUNICATIONS SECTION

Full-Time Staff: 1

Operations

Cable distribution:	videotape recordings	1,670
	films	67
	audio tapes	982
		2,719

Notes and Observations

The section maintains an intercom telephone system to all classroom outlets for 14 hours per day, and acts as general C.I.T. message centre from 5:00 p.m. to 11:00 p.m. daily.

FILM PROJECTION SECTION

Full-Time Staff: Nil

Operations

Film projection sessions	1,443 sessions

Notes and Observations

1. The figure shown for projections represents a total of 2,779 films shown. This is an increase of 17% on the total for the previous year.
2. The work of the section is carried out by a pool of some 12 part-time staff, controlled by the Division's Central Office, for service on and off the campus.

EQUIPMENT DEPOT SECTION

Full-Time Staff: 2

Operations

Loans of items of pool equipment (approximately 150)	7,556 issues/loans

Notes and Observations

1. The figure shown for issues of equipment represents an increase of 60% over the total for the previous year.

2. With the assistance of part-time personnel, the Depot supervisors service two main outlets in the Hall Building for 14 hours daily (76 hours weekly) and one outlet in the Norris Building for 6 hours daily (30 hours weekly).

3. In addition to holding stocks of portable equipment items for issue on request, the various Depots also offer resources for photocopying, film inspection and emergency repairs to equipment in their respective service areas.

MEDIA PRODUCTION FACILITIES SECTION — Full-Time Staff: 1

Operations

Fixed Facilities: Bookings

	Bookings	Hours in Use
Television Studio 'A'	144	962
Television Studio 'AE'	247	1,386
Total Complex, Studio 'A'	391	2,348
Television Studio 'B'	129	584
Sound Studio 'C'	178	652
Dubbing Suite	390	-
	1,088	3,584 plus

Mobile and Portable Television Units

	Bookings
Portapack Camera-Recorder Units	343
1 Camera Mobile Units	91
3 Camera Mobile Units	28
	462

8 mm. Film Facilities

	Bookings (Jan.-May 74 only)
Cameras, titlers, animation benches, lighting rigs	139

Notes and Observations

1. Substantial increases in bookings for production sessions were noted in all Section bookings, which were recorded and implemented by a part-time production support staff of 8, trained and directed by the Section Supervisor.

2. Bookings for TV/audio fixed facilities rose by 10% over the previous year's figures, and the total of hours of use by 25%.

3. Bookings for portable equipment similarly show a rise of some 10% over the previous year's total, but this trend has been artificially reduced in the Division's records by the signing-out on permanent loan of individual units to Departments whose incessant demands made such earmarking essential.

SPECIAL EVENTS

Operations

Public address systems, stage lighting arrays, media displays, exhibitions	635 bookings

Notes and Observations

1. Bookings accepted show an increase of over 300% by comparison with the previous year.

2. The increasing sophistication in equipment required by clients has resulted in an upgrading by C.I.T. technical staff of major units such as portable P.A. kits and lighting system.

APPENDIX

OTHER DIVISIONAL COMPREHENSIVE SERVICES

Operations

Photocopying Service

Transparencies produced from clients' originals	7,500 plus

Audio-Duplication

Reel-to-reel and cassette copying	390 bookings

Slide Mounting

Transparencies mounted or remounted	4,200 units

Classroom Installation Servicing

Overhaul of 441 items of equipment and installation in 12 auditoria and 96 lecture-rooms, over 4 week cycle	3,024 jobs

Supplies and Sales: Statistics

Utility softwares expended or sold to campus users of C.I.T. equipment:-

Audio Tapes	1,536 reels/cassettes
Videotapes	503 reels
Projector Lamps	901 replacements
Overhead Acetate Foils	15,000 sheets
Sundries (markers, cells, etc.)	1,580 units

MEDIA SERVICES DIVISION Full-Time Staff: 2

Functions

The C.I.T.'s Media Services Division provides resources for the location, procurement, storage and distribution of instructional softwares, with a particular emphasis on film and videotape recordings.

Its library currently contains 750 film-titles (for on-campus use and distribution to the general public) as well as extensive holdings of videotapes, 8-millimetre film loops, and audio-recordings. A small preview cinema is maintained, to accommodate groups for screening, discussion and production sessions.

Operations

Division Library: Film and Videotape

Issues to on-campus users	1,870
Loans to off-campus users	568
(Resultant number of showings: 8,739)	

Film Search and Procurement

Titles brought in from distributors for campus use	1,071

Mini-Cinema

Bookings	3,509

Film Inspection

Total films examined, repaired, rewound	11,382

Total: Major transactions only: 11,243

Notes and Observations

By comparison with the figures for 1972-73:

1. In volume, issues to University users of films and videotapes showed

an increase of 38%.

2. Issues from the C.I.T. library to off-campus borrowers rose by 63%.

3. Overall volume of titles handled by the Division increased by 21%.

LANGUAGE AND LEARNING LABORATORIES DIVISION

Full-Time Staff: 3

Functions

The principal responsibility of the Division is for the provision of conventional language laboratory facilities for the various University Departments of Classical and Modern Languages and allied disciplines such as Linguistics.

Resources are also available in the laboratory complex for access to self-paced video and audio programmes in the learner-passive and learner-active modes.

The Division also provides a cassette-duplication service for the distribution on and off campus of language materials.

Operations

Total of student-hours serviced	70,012.2	hours
Total of language audio-tapes duplicated	572	units
Laboratory orientation course	1	transaction
Laboratory utilisation seminar	1	transaction
Total transactions	70,566	

Notes and Observations

1. Twenty different programme series were provided during the year. Language series covered French, English, Spanish, German, Russian, Italian, Modern Hebrew and courses in English as a Second Language.
2. The current capacity of all laboratories is 93 student places, which are functional for 70 hours per week. Special dialling codes on the public telephone system also allow of off-campus access to laboratory language programmes.
3. It was estimated that the outside link with laboratory programmes provided by the Bell Telephone system was in use 72% of the available time.

MATERIALS PRODUCTION DIVISION

Full-Time Staff: 6

Functions

The Division is responsible for the provision to the University community of production services in the areas of Film, Graphic artwork, Photography, and Television and Audio working. Four sections inside the Division correspond to these specialist fields of operation.

FILM SECTION

Full-Time Staff: Nil

Operations

Support Services to Academic Courses	Service Units
Department of Fine Arts (Moving Pictures Programme)	
Audio transfers, mixes, dubbing and editing services for student films	97 projects
Supply of animation facilities	6 projects
Supply of editing and synchronization facilities	1 project
Lectures and practical courses delivered	9 sessions
Department of Education (Educational Technology Programme)	
Supply of animation facilities	2 projects
Supply of editing and synchronization facilities	1 project
Conservatory of Cinematographic Art	
Supply of filming facilities	1 project
Supply of editing facilities	1 project
	118 transactions

University Production Projects

Department of Mechanical Engineering	
Colour animation film on crystal dislocations	3 units
Department of Civil Engineering	
Colour film record of concrete canoe experiment	1 project
carried over	4 transactions

carried over	4 transactions
Department of French	
Black-and-white film on phonetics	1 project
C.I.T.	
Colour film on animation techniques	1 project
	6 transactions

Co-Productions or Production-Support Operations with Non-University Groups

Aluminum Company of Canada	
Colour sound film special, Buckminster Fuller	1 project
Henry Strub Enterprises	
Colour sound film, Whale Bay Inuit	1 project
Weetaltuk film/TV/radio profile	1 project
Kozak Productions	
Colour sound film, Montreal Ukranian Community	1 project
CEGEP Saint-Jean	
Untitled colour sound instructional film	1 project
	5 projects

Total Transactions: 129

Notes and Observations

1. The work of the Film Unit is carried out by the Assistant Director, Materials Production, C.I.T., with the assistance of a specialist technician seconded by courtesy of the Head of the Technical Division from his staff.

2. The Section records indicate that the amount of sound-tape expended in support of Fine Arts Moving Picture student projects during the year was in excess of 143,380 feet. This represents the footage for over 66 continuous hours of film.

3. Facilities were extended on a goodwill or courtesy basis during the year to the National Film Board of Canada, International Cinemedia, the Canadian Broadcasting Corporation, CFCF Television, Crawley Films, the film units of the Aluminum Company of Canada, the University of Ottawa, the University of Montreal, and the Community College of Thunder Bay, the Canadian Film Institute and the National Film Archive.

GRAPHICS SECTION

Full-Time Staff: 1

Operations

Pieces of completed artwork supplied to specification	899 items
Consultancy and advisory sessions	123 sessions
Instruction and workshop sessions	5 sessions
Total Transactions	1,027

Notes and Observations

Whether as direct production or consultancy, client demands for artwork range from routine craft jobs such as display posters and notices to professional or original creations such as engineering drawings, survey maps, statistical graph-work and brochure layout and typography.

PHOTOGRAPHY SECTION — Full-Time Staff: 2

Operations

Transparencies and slides processed	21,077 pieces
Photographic prints processed	5,108 pieces
Films supplied and processed	1,640 rolls
Miscellaneous services (slides mounted, negatives produced, etc.)	1,512
Total Transactions	29,337

Notes and Observations

1. The Photography Section accepts as a routine commitment the coverage of displays, exhibitions and social events in the University, and of conventions and congresses.

2. The growing reputation of the Section as one of the foremost Centres for specialist custom work in Eastern Canada has been reflected by an embarrassing increase in demand from outside clients, particularly in the Diplomatic Corps.

3. The figures of output by the Section indicate a rise of some 80% over the previous year in overall volume of business.

TELEVISION AND AUDIO SECTION

Full-Time Staff: 2

Operations

Synchronized Slide-Tape Presentations

Programmes for the Departments of Engineering and French, and the University Library	6 projects

Videotape Presentations

Programmes for the Departments of French, Geology, Marketing and Quantitative Methods, and the Division of Continuing Education	11 projects

Audio Presentation

One Celebrity Lecture by Dr. R.D. Laing, recorded for the Department of Continuing Education	1 project
Total Transactions	18

Notes and Observations

As mentioned above, the output of the Section included a prototype colour videotape production and the videotaping of four one-hour lecture sessions for playback to classes in the absence of the lecturer.

CINEMA SERVICES DIVISION

Full-Time Staff: 1

Functions

The primary responsibility of this Division is to service demands for film projection under cinema conditions inside the University. A major proportion of activities is dedicated to supporting the regular repertory programmes, festivals and special events organized by the Conservatory of Cinematographic Art. Film programmes are also arranged and serviced for academic Departments, University Administration Offices, and campus organizations. A secondary area of activity has developed on an informal basis by the use of the Alumni Auditorium for public events other than cinema shows, such as concerts, theatrical performances, public lectures, and convention meetings. The C.I.T. Cinema Manager has accordingly acquired an unofficial status as coordinator and front-of-house controller for these special events.

Operations

Cinema sessions organized and serviced	480
Film titles handled	903
Total Transactions	903

Notes and Observations

1. The number of films handled, which were received in all stages of disrepair as well as in all imaginable formats and languages, represents the work-load for a commercial cinema of perhaps 10 to 12 years.
2. The number of films handled in the year represents an increase of approximately 40% on the volume recorded for the preceding year.

RESEARCH AND DEVELOPMENT DIVISION

Full-Time Staff: 1

Functions

The activity of this Division in reviewing and assessing innovations in the general field of educational technology is concentrated largely on the development of hybrid video-computer courseware and methods for individualized instruction and testing.

Operations

During the year, a system was developed and refined for the detailed implementation by senior students of outline instructional scenarios drafted by faculty instructors.

Coursewares were produced and tested for use in the Departments of Psychology, Computer Science, Physics and Education.

A specialized computer-assisted learning language, CITCAN, was developed and fully tested. A random-access video-unit was also designed and constructed to implement its application, in collaboration with the Technical Division.

Routine services were continued in consultancy to Departments on course design and testing problems, and the dissemination of periodic reports on audio-visual video- and computer-aided learning products and systems.

Consultancy visits and demonstrations were also arranged for specialist visitors from universities in Canada, the U.S.A. and the United Kingdom.

Notes and Observations

The Division Head is a serving member of the eight-man National Research Council committee on computer-assisted learning languages, and during the year delivered several lectures and papers on his specialty at conventions and computer science colloquia.

APPENDIX I: Analysis of Demand for Services

The most significant indices of user-demand for C.I.T. services emerge from the statistics recorded of applications for major facilities and services directed to the Technical Operations and Media Services Divisions. Extracts from the records show:

	Bookings Technical Operations	Bookings Media Services	Total
Faculty of Arts, Department of			
Anthropology & Sociology	28	32	60
Applied Social Science	40	31	71
Classics/Modern Languages	17	2	19
Economics	1	10	11
Education (general)	12	26	38
Educational Technology	309	44	353
English	85	124	209
Fine Arts (general)	249	409	658
French	10	475	485
Geography	7	92	99
History	3	31	34
Humanities of Science	37	149	186
Music	-	2	2
Philosophy	24	5	29
Political Science	11	14	25
Psychology	88	229	317
Religion	16	31	47
Theatre Arts	14	7	21
	951	1,713	2,664
Faculty of Commerce, Department of			
Commerce (general)	12	3	15
Management	72	77	149
Marketing	16	14	30
Quantitative Methods	8	11	19
	108	105	213

	Bookings Technical Operations	Bookings Media Services	Total
Faculty of Engineering, Department of			
Civil Engineering	6	21	27
Computer Science	4	11	15
Electrical Engineering	6	19	25
Mechanical Engineering	5	110	115
	21	161	182
Faculty of Science, Department of			
Biology	-	43	43
Chemistry	5	4	9
Geology	8	15	23
Mathematics	1	-	1
Physics	2	88	90
	16	150	166
University Administration and other Offices			
University Administration (general)	23	-	23
Division of Continuing Education	23	23	46
Liaison Office	5	2	7
Library	5	7	12
Youth Habilitation Centre	37	44	81
Conservatory of Cinematographic Art	1	2	3
School of Retailing	5	3	8
	99	81	180
Campus Organizations			
TV Sir George	131	68	199
E.S.A.	7	12	19
D.S.A.	19	7	26
	157	87	244

	Bookings Technical Operations	Bookings Media Services	Total
Off-Campus Organizations			
Community, commercial, other academic institutions	223	568	791
Total Bookings	1,575	2,865	4,440

Notes and Observations

1. The figures shown reflect only a proportion of the interface relationships between the C.I.T. and the community it serves. Transactions rated as minor are excluded, as are all services provided by the Technical, Language Laboratories, Materials Production and Cinema Services Divisions.

2. Nevertheless, the spread of demand across the University is encouraging, although there is obviously an overwhelming preponderance of demand from the Faculty of Arts.

3. Competition by off-campus organizations for C.I.T. services at semi-commercial rates is a matter for concern. On the one hand, the Centre regards catering to such demand as a form of contribution to the University's community-service function. On the other, the diversion of resources and energies to purposes of secondary importance in its terms of reference involves a division of purpose which sometimes results in conflicts of interests and always implies some measure of doubt.

APPENDIX II: Special Allocations of C.I.T. Equipment

(Holdings of equipment listed in C.I.T. inventory for accounting and maintenance, but issued to University offices and departments on long-term loan for exclusive individual use.)

Faculty of Arts, Department of

Anthropology & Sociology	1 overhead projector 2 audio recorders (cassette)
Applied Social Science	1 16mm. film projector 2 audio recorders (reel) 1 television mobile
Educational Technology	2 overhead projectors 1 audio recorder (reel) 2 audio recorders (cassette)
Fine Arts	9 slide projectors 1 portapack TV unit
Fine Arts (Moving Pictures)	1 16mm. film projector (plus special inventory)
Geography	1 overhead projector 1 film strip projector 1 slide projector 4"x3¼" 1 slide projector carousel
Humanities of Science	1 overhead projector 1 audio recorder (reel) 1 16mm. film projector 1 slide projector
Music	1 overhead projector 3 amplifier-speaker units 3 audio recorders (reel) 3 turn-tables 1 record-player (plus special inventory)

Psychology	1 slide projector
	1 audio recorder (reel)
	2 audio recorders (cassette)
	2 portapack TV units
	(plus special inventory)
T.E.S.L.	1 portapack TV unit
Faculty of Commerce	5 overhead projectors
	5 audio recorders (cassette)
Faculty of Engineering, Department of	
Civil Engineering	7 audio recorders (cassette)
Computer Science	6 TV receivers
Faculty of Science, Department of	
Biology	1 audio recorder (reel)
	1 film-loop projector
Chemistry	1 overhead projector
	1 slide projector
Physics	2 film-loop projectors
University Administration & Other Offices	
Library	1 audio recorder (reel)
	7 audio recorders (cassette)
	6 slide projectors
	2 film strip projectors
	1 turn-table-amplifier unit
Information Office	8 TV receivers

APPENDIX III: Functional Organization Schematic

Office of
ASSISTANT VICE-RECTOR
COMMUNICATIONS

CENTRE FOR INSTRUCTIONAL TECHNOLOGY

ADMINISTRATIVE and CLERICAL

- Records
- Reception
- Communications
- Finances

ENGINEERING & TECHNICAL

- Design
- Installation
- Maintenance

SERVICES & RESOURCES

TECHNICAL OPERATIONS
- Inventory control
- Equipment supplies
- Facilities and resources scheduling
- Operator support services
- Purchasing
- Smallware sales

PRODUCTION
- Film
- Graphics
- Photography
- Television/Audio

MEDIA SERVICES
- Film and video library
- Film and video search
- Preview facilities

LEARNING LABORATORIES
- Language laboratory programming
- Audio materials duplication

CINEMA SERVICES
- Cinema projection
- Organization and programming, special events

RESEARCH & DEVELOPMENT

- Audio-visual techniques & equipment assessment
- C.A.I. projects

APPENDIX IV: Staff List (Full-Time Personnel)

ADMINISTRATION

Secretary, Administration:	Norma Ewen
Secretary, Reception & Communications:	Shakila Khan

TECHNICAL DIVISION

Head:	Nicholas Ostopkevich
Supervisor:	Robert Swezey
Technical Specialists:	Daniel Cailloux
	Alain Dumont-Frenette *
	Gary Kershaw
	Peter Mallette
	Roderick Smith
	Stephan Smolar

TECHNICAL OPERATIONS DIVISION

Coordinator:	Mark Schofield
Supervisor:	Thomas McElroy
Scheduling Officer:	Elizabeth Arnold
Studio Operations Officer:	Neil O'Brien
Technical Operators:	Roman Martyn
	Celia Miller
	Roger Tyrrell
	Demetre Visvardis

MEDIA SERVICES DIVISION

Media Consultant:	Iris Robbins
Media Officer:	Rita Fundner

LANGUAGE AND LEARNING LABORATORIES DIVISION

Head:	Gerald Strei
Supervisor:	Gabriel Villamizar
Operator:	Alain Lamarche

MATERIALS PRODUCTION DIVISION

Head:		Bernard Queenan
Film Section:		Alain Dumont-Frenette (seconded*)
Graphics Section:		Leslie Takach
Photography Section:	Head	Winston Cross
	Assistant	Stephen Finlayson
Television & Audio Section:	Producer	James Joyce
	Secretary	Vera Mesenzev

CINEMA SERVICES DIVISION

Cinema Manager:	Catharinus Huyer

RESEARCH AND DEVELOPMENT DIVISION

Head:	Gary Boyd